

A NEW SPECIES OF ORCHIDACEAE FROM VICTORIA

by

DAVID L. JONES*

***Pterostylis aestiva* sp. nov.**

ex affinitate *Pterostylis decurvae* R. S. Rogers, differt: floris colore (saturate aeruginoso), floris basi perbulbosa, antherae rostro prominenti (ca. 1mm. longo), labello longiore (14.5–19.0mm.) atque columna longiore (14–16mm.).

Plant very slender, 12–35 cm tall. *Radical leaves* absent during anthesis, appearing as a rosette on non-flowering plants. *Stem-bracts* 1–3, well developed, up to 4 cm long, linear-lanceolate with long acuminate tips, the margins entire and often revolute. *Flower* solitary, rarely two, variable in size, translucent-white with dark bluish-green longitudinal stripes, often reddish towards apex. *Galea* 22–27 mm long (measured in a straight line from the base of the flower to the petal tips), erect at base, then curving forward through a semi-circle and ending in a filiform point 10–16 mm long. *Lateral sepals* 40–52 mm long, conjoined for three-quarters of their length to form an erect lower lip which is euneate and notched at the centre of upper margins, the latter internally revolute and forming a wide very gibbous sinus, contracting suddenly into filiform points which rise 25–40 mm above the galea. *Labellum* 14.5–19 mm long, linear-oblong, on an irritable claw, upright for two-thirds of its length then curving forwards, reddish brown in colour, with a longitudinal ridge running along the centre and expanding at the tip; apex obtuse, the point protruding conspicuously through the sinus and in some specimens still visible when retracted into the galea; appendage relatively large, curved, trifid, penicillate. *Column* 14–16 mm long, the upper angle of the wings produced into an acute linear tooth about 1.5 mm long, the lower lobes attenuated, slender, almost linear-obtuse with very few cilia visible from the exterior but densely packed on the inner margins. *Stigma* central, elliptical, 7–10 mm long. *Anther* about 2.5 mm long, usually with a small rostrum about 0.1 mm long. *Pollinia* four, linear-oblong, about 1.8 mm long.

FLOWERING TIME :

January—early April.

DISTRIBUTION :

At present apparently restricted to Victoria where it is confined to the highlands of the north-east and is often locally abundant. Its appearance in the highlands and tablelands of southern New South

* Bayswater, Victoria.

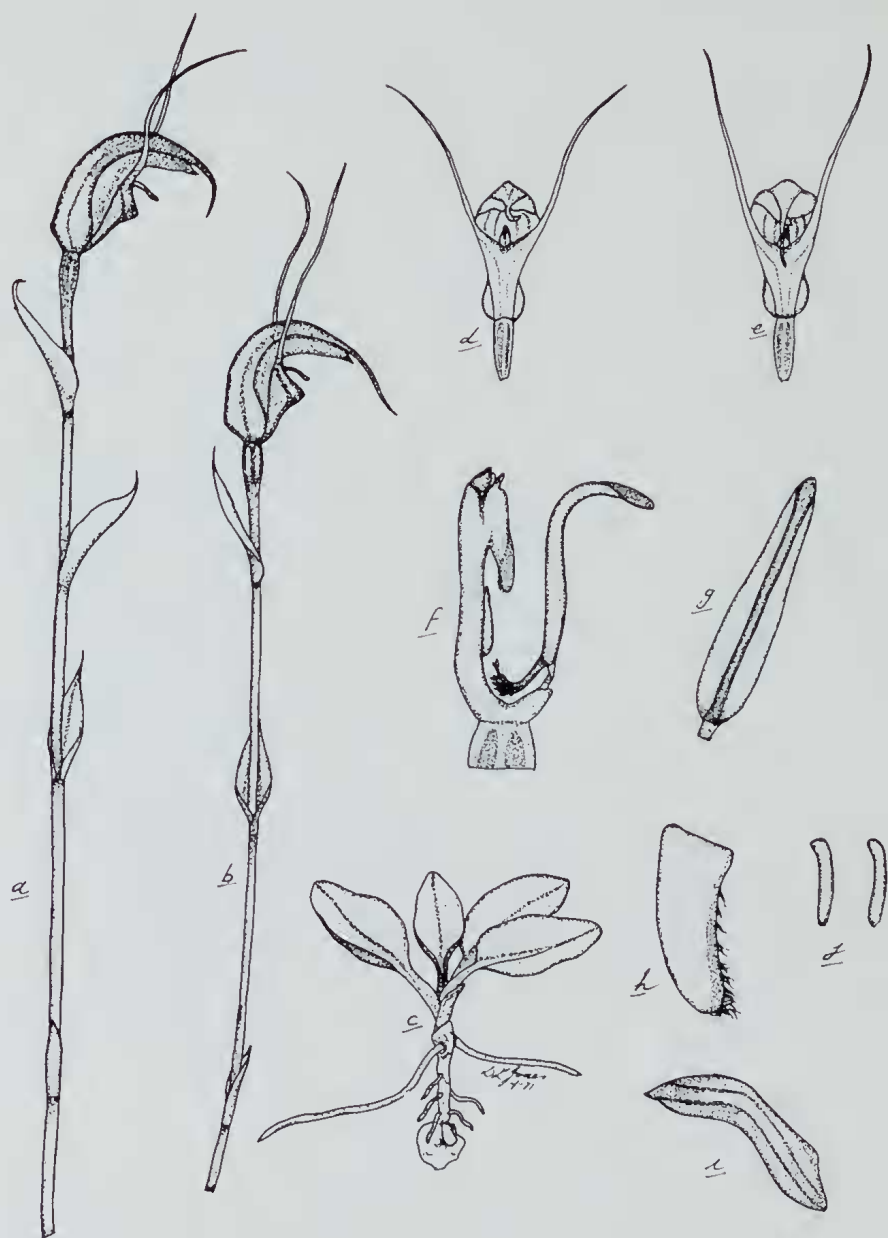


Fig. 50—*Pterostylis aestiva* D. L. Jones sp. nov. a, b flowering specimens, $\times 2/3$; c juvenile rosette of leaves, $\times 2/3$; d, e flowers from front, $\times 2/3$; f column and labellum, from side, $\times 2$; g labellum from above, flattened, $\times 2$; h lower lobe of column wing, $\times 3\frac{1}{3}$; i lateral petal, $\times 1$; j pollinia, $\times 3\frac{1}{3}$, all specimens from Mount Hamilton.

Wales and the Australian Capital Territory is to be anticipated, with a possible extension into Tasmania.

TYPEIFICATION :

Holotype—About 6 miles directly NNW. of Wulgulmerang Post Office, NE. Gippsland, Victoria, A. C. *Beaughlehole* 35911, 8.i.1971 (MEL—Isotypes in K and NSW).

REPRESENTATIVE COLLECTIONS :

[Grid references given below refer to those that have been selected for the mapping scheme for the flora of Victoria now being undertaken jointly by Monash University and the National Herbarium of Victoria.]

Little River area, Benambra road, about 8 miles NNW. of Wulgulmerang Post Office, A. C. *Beaughlehole* 33274, 7.i.1970 [Grid V53]; Wombargo Track Turnoff, Benambra road, about 6 miles NNW. of Wulgulmerang Post Office, (Holotype), A. C. *Beaughlehole* 35911, 8.i.1971 [Grid W8]; Sailors' Lake, about 2 miles SW. of Wulgulmerang Post Office, A. C. *Beaughlehole* & K. C. Rogers (ACB 36077), 13.i.1971 [Grid W8]; upper reaches of Milky Creek, Rocky Range Wildlife Reserve, about 5 miles NE. of Wulgulmerang Post Office, A. C. *Beaughlehole* & K. C. Rogers (ACB 36103), 14.i.1971 [Grid W8]; upper reaches of Milky Creek, Rocky Range road, about 5 miles NE. of Wulgulmerang Post Office, A. C. *Beaughlehole* & K. C. Rogers (ACB 36106), 14.i.1971 [Grid W9]; Little Mount Hamilton, about 6 miles NNE. of Wulgulmerang Post Office, A. C. *Beaughlehole* & K. C. Rogers (ACB 36173), 17.i.1971 [Grid V53]; Boundary Creek, Gelantipy road, about 2½ miles SSW. of Wulgulmerang Post Office, A. C. *Beaughlehole* 36724, 10.ii.1971 [Grid W8]; Ensay-Bentleys Plains road, about 7 miles NE. of Ensay South, about 24 miles SW. of Wulgulmerang Post Office, A. C. *Beaughlehole* 37013, 23.ii.1971 [Grid W15]; Joker Gully, Benambra road, about 6 miles NNE. of Wulgulmerang Post Office, A. C. *Beaughlehole* & K. C. Rogers (ACB 37264), 7.iii.1971 [Grid V53]; Devils Backbone, near Campbells Knob, about 9 miles SE. of Wulgulmerang Post Office, A. C. *Beaughlehole* 37281, 8.iii.1971 [Grids W17, W18]; between Tulach Ard property and Tulach Ard Gorge on Snowy River, about 14 miles SSE. of Wulgulmerang Post Office, A. C. *Beaughlehole* 37297, 9.iii.1971 [Grid W17]; southern foot of Mount Hamilton, Snowy River road, about 5½ miles NNE. of Wulgulmerang Post Office, A. C. *Beaughlehole* & K. C. Rogers, (ACB 37398), 13.iii.1971 [Grid W8]; near Mt. Meenak, Suggan Buggan Ranges, D. L. Jones & K. C. Rogers, 1.iv.1972 [Grid V54.]

DISCUSSION :

The distinctiveness of this orchid was first recognized by A. C. Beaughlehole during his plant survey of East Gippsland for the Victorian National Parks Authority. The author received specimens from him during 1970 (ACB 33274) but at the time referred them to a form of *P. decurva* R. S. Rogers. However, Beaughlehole made further widespread collections during the bountiful 1971 season and examined many colonies representing both pure and mixed populations, and during these studies he became convinced that two species of *Pterostylis* were involved in the area. Even after examining a good selection of specimens, the author was doubtful at first about its status, and con-

sidered that *P. aestiva* might have been a highland development of *P. decurva*. However, after studying and measuring many specimens collected by Beaglehole, and examining colonies in the field at Wulgulmerang, the author was convinced that it was worthy of specific rank. The two species do not always grow together, but where they are coextensive *P. aestiva* can be recognized easily by its larger, bluish-green, inflated flower. Specimens can be readily identified by the much longer labellum; in some specimens this is so long that it still protrudes from the sinus when in the reflexed position. A comparison of the main features of each is given in Table 1. *P. aestiva* also has affinities with *P. coccinea* R. D. FitzG. This latter species however has a larger, usually reddish flower with a scabrous sinus, and a much longer labellum. Both species grow intermingled on Mounts Hamilton and Little Hamilton in north-eastern Victoria but are easily distinguished from one another. The only other species that could possibly be confused with it is *P. laxa* J. A. P. Blackmore. However, the latter can easily be distinguished from *P. aestiva* by its acuminate labellum and non-gibbous sinus.

TABLE 1
(Contrasting Characters)

<i>P. decurva</i>	<i>P. aestiva</i>
Labellum 11.5-13.0 mm long ..	Labellum 14.5-19.0 mm long but usually about 15.5 mm
Column 11-13 mm long ..	Column 14-16 mm long
Base of flower slightly bulbous or flat, 5 mm across front x 6 mm along side	Base of flower extremely bulbous, 8 mm across front x 9 mm along side
Flower yellowish-green ..	Flower deep bluish-green

ACKNOWLEDGEMENTS

I am greatly indebted to A. C. Beaglehole for his excellent assistance at all times and for the copious material and information which he gave me, especially during the summer of 1971. I also acknowledge the generous help of J. H. Willis, formerly of the National Herbarium of Victoria, for preparing the Latin description as well as editing and criticising the manuscript.